



**UNITED STATES DEPARTMENT OF COMMERCE**  
**Patent and Trademark Office**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/035,617    03/05/98    TOKIMOTO    T    7761-009

020583  
PENNIE AND EDMONDS  
1155 AVENUE OF THE AMERICAS  
NEW YORK NY 10036-2711

TM02/0926

EXAMINER

NELSON, A

ART UNIT

PAPER NUMBER

2675

DATE MAILED: 09/26/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
09/035,617

Applicant(s)  
Tokimoto et al.

Examiner  
Alecia Nelson

Art Unit  
2675



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Jul 9, 2001
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 20) ☐ Other: \_\_\_\_\_

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. ***Claims 1, 6, 8-12, 15, 16, and 18-23*** are rejected under 35 U.S.C. 102(b) as being anticipated by Rosenberg et al. (U.S. Patent No. 5,721,566).

With reference to **claims 1, 6, 8-11, 15, 16, and 18-23**, Rosenberg teaches an input device, in the form of a joystick for usage in a virtual environment of a video game, for providing information with a data processing system (see column 6, lines 61-63) comprising: means for containing a fluid medium (38) in a hermetically sealed manner (see column 7, lines 32-41), means for communicating the fluid medium having a conduit (34), through which the fluid medium going out from or coming into the containing means (see column 7, line 62-column 8, line 8), means for restricting flow of the fluid medium passing through the communicating means, having a voltage driven actuator arranged in the conduit for varying a cross-section of the conduit to restrict the flow of the fluid medium therethrough (see column 8, lines 58-63), means for applying pressure to the fluid medium responsive to direct or indirect inputs from an operator so as to change volume of the fluid medium contained in the contain means, thereby the fluid medium is passed through

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the communication means (see column 8, lines 15-24), means for generating control information responsive to operation of the pressure applying means by the operator, the generated control information being input to the data processing system (see column 10, lines 18-35), means for generating feedback information responsive to the control information input from the control information generating means (column 10, lines 1-8), whereby the restricting means restricts the flow of the fluid medium through the communication means responsive to the feedback control information fed by the feedback information generating means (see column 10, lines 1-8). With reference to **claim 12**, it is taught an interface system (180) that provides two or three degrees of freedom to user object (18) and mechanical input and output. System (180) includes a gimbal mechanism (182), optional linear axis member (184), transducer systems (106a, 106b), and user object (18) (see column, 25, lines 56-62).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to

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the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

4. *Claims 4-10, 14-20, 24, and 25* are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenberg et al..

With reference to the claims, Rosenberg teaches an input device for providing information with a data processing system (see column 6, lines 61-63) comprising: means for containing a fluid medium (38) in a hermetically sealed manner (see column 7, lines 32-41), means for communicating the fluid medium having a conduit (34), through which the fluid medium going out from or coming into the containing means (see column 7, line 62-column 8, line 8), means for restricting flow of the fluid medium passing through the communicating means, having a voltage driven actuator arranged in the conduit for varying a cross-section of the conduit to restrict the flow of the fluid medium therethrough (see column 8, lines 58-63), means for applying pressure to the fluid medium responsive to direct or indirect inputs from an operator so as to change volume of the fluid medium contained in the contain means, thereby the fluid medium is passed through the communication means (see column 8, lines 15-24), means for generating control information responsive to operation of the pressure applying means by the operator, the generated control information being input to the data processing system (see column 10, lines 18-35), means for generating feedback information responsive to the control information input from the control

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information generating means (column 10, lines 1-8), whereby the restricting means restricts the flow of the fluid medium through the communication means responsive to the feedback control information fed by the feedback information generating means (see column 10, lines 1-8).

Rosenberg et al. fails to teach the usage of an electroviscous fluid, however does state that the device can be operated with a liquid fluid medium.

Therefore it would have been obvious to one having ordinary skill in the art to use an electroviscous fluid in the device as taught by Rosenberg et al.. to thereby provide a user with a force feedback controller that uses voltage controlled actuators which is less expensive and more reliable.

### ***Response to Arguments***

5. Applicant's arguments with respect to *claims 1, 4-12, and 14-22* have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any response to this action should be mailed to: Commissioner of Patents and Trademarks Washington, D.C. 2023; or faxed to: (703) 872-9314, (for Technology Center 2600 only). Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alecia D. Nelson whose telephone number is (703)305-0143.

If attempts to reach the above examiner by telephone are unsuccessful, the examiner's supervisor, Steve Saras, can be reached at (703)305-9720.

adn/ADN  
September 21, 2001

  
DENNIS-DOON CHOW  
PRIMARY EXAMINER